Newsletter June 2022

In EuropaBON’s fourth newsletter, we will report-back on the workshops on identifying Essential Biodiversity Variables and surveying existing and novel biodiversity monitoring methods for EuropaBON, the launch of our User & Policy Needs Assessment Report and other important activities, events and announcements!

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1 Latest project achievements

EuropaBON's User & Policy needs assessment published in RIO!

National biodiversity monitoring programmes in Europe face many challenges: too little coordination, inadequate technical and financial resources as well as unclear targets. This is one of the conclusions of EuropaBON's recently launched **User and Policy Needs Assessment**. The analysis includes data from more than 350 experts in policy, science and environmental protection. The assessment identified a fragmented biodiversity data landscape that cannot currently easily answer all relevant policy questions. Quantity and quality of biodiversity baseline datasets differ for the different countries, ranging from non-existent biodiversity monitoring due to capacity issues, to regular monitoring of ecosystem processes and state. By engaging stakeholders and experts in both member states and non-member states and from several EU bodies, we identified key challenges and ways to address these with targeted solutions towards building a joint European Biodiversity Monitoring Network. In the report, EuropaBON also presents a list of 15 Essential Biodiversity and Essential Ecosystem Service Variables (EBVs and EESVs) that were ranked most important for monitoring across Europe, including their current monitoring status across European countries.

EuropaBON also held a **one-hour webinar on 4 May 2022** to officially launch the User and Policy Needs Report and to present the findings of the assessment. With almost 150 registered participants, the webinar was very well attended. After the presentation by Hannah Moersberger (EuropaBON partner at iDiv, UFZ and lead-author of the report), the EuropaBON team was available to answer questions from participants in an interactive discussion space.

If you are interested in watching the recording of the webinar, please contact us at info@europabon.org.

Hannah Moersberger, Helmholtz Centre for Environmental Research
Workshop on identifying EBVs and EESVs for EuropaBON

On 29 April 2022, EuropaBON held a full-day, online expert workshop to identify essential variables to monitor biodiversity and ecosystem services for the new European monitoring system. The aim of the workshop was to define a list of priority EBVs that responds to policy needs as identified in the EuropaBON's User & Policy Needs Assessment, and robust enough to reliably detect biodiversity trends over time. Together with 64 biodiversity researchers, we tackled the tasks of filling thematic gaps in EBVs (across realms and EBV classes) and (re)defining spatial-, and temporal resolutions and taxonomic scopes of the different EBVs. The consolidated essential variable list will also be evaluated in terms of relevance to the EU Biodiversity Strategy, level of sustainability, and interoperability.

This EBV consolidation process is important for providing a consistent and scientifically sound framework that builds on existing monitoring initiatives and extends them in a cost-effective way through models and new monitoring.

Jessi Junker, EuropaBON scientific coordinator

Novel Biodiversity Monitoring Methods workshop

Between 11 and 13 May 2022, EuropaBON invited experts in monitoring methods and technology, and experts in biodiversity monitoring programs for any habitat or taxa, to come together in our online Novel Biodiversity Monitoring Methods workshop for a unique opportunity to help bridge the gap between innovation and applied practice. The discussion and assessments formed in this workshop feeds directly into how EuropaBON designs an actionable biodiversity monitoring network to support policy decisions.
EuropaBON has been endorsed as a regional BON by the GEO BON community

We are happy to announce that EuropaBON has officially been endorsed as a regional BON by the implementation committee of the Group on Earth Observations Biodiversity Observation Network (GEO BON). Acting on the recipe proposed by GEO BON, the EuropaBON partners are working collaboratively to develop the blueprints for the system that will deliver the vital information required by the European Commission’s 2030 Biodiversity Strategy aimed at halting and reversing the loss of biodiversity.

Each of the EuropaBON partners brings unique value to the coalition by providing and reinforcing aspects ranging from communication and coordination to research, analysis and visualisation of information, fostering open, transparent and collaborative work that responds directly to the needs of users of biodiversity information in the region.

To read the full announcement, please go to the GEO BON news page.

In addition, a press release, announcing the EuropaBON achievement, has been issued in the leading online science communication platforms EurekAlert! and AlphaGalileo.

Jessi Junker, EuropaBON scientific coordinator

2 News from the secretariat

EuropaBON counts almost 800 members!
Our network is steadily growing as we already have **781 members** (as of 27.06.2022), representing **406 organisations** from **56 countries** across Europe and beyond, and more than **700 followers** on our Twitter account. EuropaBON is however actively engaging with potential new stakeholders to join and expand the network, in particular to fill specific gaps that have been identified in the membership, including the business sector, NGOs and citizen scientists.

To better understand our members’ interests and needs, as well as their connections, we want to map the network and relationships among them across the different sectors of academia, governmental and non-governmental organisations, private industry and citizen science. This will also allow us to evaluate the impact that EuropaBON is having on facilitating new connections and strengthening already existing connections among members and their institutions and help us to shape and co-design an effective, user-oriented EuropaBON.

It’s never too late to become a member of our growing network! If you are not a member yet, but would like to get more involved in EuropaBON, please register below.

*Jessi Junker, EuropaBON scientific coordinator*

In relation to this, we would like to ask you to please help us by filling out this three-question **survey on which EU projects/ infrastructures our members are currently involved in**. To participate in the survey, please follow the link below.
Online Survey
Assessing the representation of key European projects in the EuropaBON network

Data contributions by members in the EuropaBON network

The EuropaBON WP3 has set up a web-based database to collect/record the
main current biodiversity data workflows across Europe. This database maps how biodiversity data collected in monitoring schemes across Europe flows through different institutions and programs and gets processed to produce Essential Biodiversity Variables and other European policy-relevant indicators. Some examples of European level biodiversity data workflows are the reporting of the Habitats and the Water Framework Directives, the Wild Bird Indicators produced in the Pan-European Common Bird Monitoring Scheme or the European grassland butterfly indicator produced in the European Butterfly Monitoring Schemes.

The database is now available online through the EuropaBON website for its consultation: Download of the metadata contained within the database will be soon made available to EuropaBON members. Here we make another call to all EuropaBON members and beyond (the European community working on biodiversity monitoring) to contribute to the database by pointing us to current European level biodiversity data workflows they know of and that are not currently covered in the database.

We would like to thank members that have already contacted and helped us with this very important task to advance knowledge about the current biodiversity observation capacity across Europe, its weaknesses, biases, good practices and successes.

If you are interested in helping with this task, do not hesitate to contact us!
Contact person: Alejandra Morán-Ordóñez (a.moran@creaf.uab.cat)

Alejandra Morán-Ordóñez, Forest Sciences Centre of Catalonia

**EuropaBON launched it's brand new website**

EuropaBON is excited to announce the relaunch of its newly designed webpage, which went live in June 2022 and is located at: [https://europabon.org](https://europabon.org)
For any suggestions and queries: web@europabon.org

Christian Langer, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig

**2.1 EuropaBON at recent & upcoming**
Annual iDiv conference 2022

On 25 and 26 April 2022, iDiv held its Annual Conference, where the community gathered back together in an inspiring meeting, and to promote scientific exchange through formal and informal interactions across multiple facets of biodiversity research.

EuropaBON took part at the conference with an informative session, where project members along with the EuropaBON coordinator Prof. Henrique Pereira, presented the project’s User & Policy Needs Assessment, as well as the methods for identification of essential biodiversity variables for monitoring across the different ecosystems.

Jessi Junker, EuropaBON scientific coordinator

EuropaBON at the Biodiversity Spring Market
EuropaBON's Nestor Fernandez (left), Joachim Maes (middle), and Ian McCallum (right) attended the Biodiversity Spring Market in Brussels on **23 March, 2022**. The morning included keynote presentations and discussions focused on nature restoration in Europe. In the afternoon, EuropaBON staffed a booth in the Market highlighting the Projects achievements and membership and had the chance to interact with numerous other biodiversity projects and attendees.

*Ian McCallum, International Institute for Applied Systems Analysis (IIASA)*

**Diversifying the GBIF Data Model: GBIF Open Consultation**

Between 23 and 25 May, 2022 in Luxembourg, Dr. Miguel Fernandez participated as a guest at the meeting of the GBIF Nodes for Europe and Central Asia on behalf of the EuropaBON Coordination Team. The scope and objectives of the EuropaBON project presented by Miguel were very well received by the representatives of the GBIF Nodes in the region. In Miguel's message he said: "For EuropaBON and its future it is essential to be able to stand on the shoulders of giants like GBIF"; he added: "from EuropaBON we welcome all the advice given by the community responsible for the integration of more than two billion observations and counting.

*Dr. Miguel Fernandez, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig*

**World Biodiversity Forum 26 June - 1 July, 2022, Davos, Switzerland**
The World Biodiversity Forum will take place between 26 June and 1 July 2022 in Davos, Switzerland, where EuropaBON will have a dedicated workshop. The two-hour event is open to all conference participants and will take place on 29th June at 16:00 – 18:00 CET.

In this session, we will present the results of three EuropaBON work streams:

- User and policy needs of biodiversity data in Europe;
- The list and specifications of EBVs and EESVs for a European-wide biodiversity observation network;
- The operationalization of EBVs and EESVs through policy showcases such as the Habitats and Birds Directives

We will then seek active feedback from all participants in a one-hour small group discussion in World Café style. All participants will get the opportunity to give valuable feedback on the three topics presented. This feedback will be integrated in EuropaBON’s upcoming deliverables.

You can find the online programme of the conference here.

The 58th Annual Meeting of the Association for Tropical Biology and Conservation

58th Annual Meeting of the Association for Tropical Biology and Conservation

July 10-14, 2022

Conserving Tropical Biodiversity and Achieving Socio-Ecological Resilience in the Anthropocene: Opportunities and Challenges

Between 10 and 14 July 2022, EuropaBON is going to take part at the 58th annual meeting of the ATBC, which will take place in Cartagena, Columbia.

Dr. Jose W. Valdez, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig

ECCB 22-26 August, Prague, Czech Republic:
Biodiversity crisis in a changing world
EuropaBON will be part of the European Congress of Conservation Biology, which will take place between **22 and 26 August 2022** in Prague, the Czech Republic. EuropaBON will also host a symposium at this event titled "**The future of biodiversity monitoring in Europe**" where we present potential avenues to enhance and harmonise biodiversity monitoring across Europe: assessing user and policy needs; mapping current monitoring initiatives; identifying essential monitoring variables; enhancing monitoring to support the Nature Directives, Climate and Soil Policies, and Bioeconomy Strategy. We close the session with a presentation of the new European biodiversity partnership Biodiversa+ to aid in the implementation of the EuropaBON and a presentation on using a novel biodiversity data standard and platform to mainstream the Essential Biodiversity Variables.

We are also jointly hosting an information booth at the conference with our close collaborators at Biodiversa+, so please drop by for a chat if you are attending the event in-person. We look forward to seeing you there!

For further information you are welcome to contact jessica.junker@idiv.de

*Jessi Junker, EuropaBON scientific coordination*

**The International Mountain conference: Towards a Tropical Andes Biodiversity Observatory with Essential Biodiversity Variables**

The IMC2022 will take place between **11 and 15 September, 2022** in Innsbruck, Austria. IMC2022 builds upon the previous mountain conferences and aims to continue this scientific conference series exclusively targeted towards mountain-research. Hosted in the Alps, IMC2022 provides an excellent opportunity for experts from different disciplines to discuss mountain-related issues in a cross-disciplinary setting with flexible session formats. The key goals of the conference are to synthesise and enhance our understanding of mountain systems, in particular their response and resilience to global change.

EuropaBON's project coordinator Prof. Henrique Pereira, along with the project members Jose Valdez and Miguel Fernandez will attend the event, where they will represent EuropaBON.
The Biodiversity Information Standards (TDWG) annual conference: Essential Biodiversity Variables Hypercube

EuropaBON and iDiv are organising an open session at the Conference on Biodiversity Information Standards (TDWG 2022), which will take place in Sofia (Bulgaria) between 17 and 21 October, 2022. Here the team leading the development of the Biodiversity Essential Biodiversity Variables (EBV) Data Portal will put to a test and discuss with the community the work they are doing. The objective of this session is to present the EBV-Data-Portal and the gridded data structure (netCDF) and how it is now adapted to represent EBVs. During the session we will openly discuss the terms we suggest as a basis for the definition of this information standard that could provide and maintain a sustainable information framework and infrastructure that meets the needs of science and society for open, persistent, interoperable, well-described and easily discoverable biodiversity observational data.

If you are interested, you can contribute with an abstract to this session! For more information contact Miguel Fernandez (miguel.fernandez@idiv.de)

3 News from the network

EuropaBON at the AMMOD project's biodiversity monitoring conference

EuropaBON's partner Daniel Kissling from the University of Amsterdam, attended the AMMOD-organised biodiversity monitoring conference, which took place on 3 and 4 May 2022 in Bonn, Germany.

Throughout his presentation titled Automated Biodiversity Monitoring, Daniel showcased his work in the context of the Dutch biodiversity research infrastructure project called ARISE, where he is leading the team’s Monitoring Demonstration Sites.

Daniel W. Kissling, University of Amsterdam

EuropaBON member is the new scientific coordinator of
In the context of LifeWatch ERIC, a European Research Infrastructure Consortium with focus on biodiversity and ecosystem research, Daniel Kissling, EuropaBON member and leader of WP4, has been appointed scientific coordinator of the Virtual Laboratory & Innovation Center (LW-VLIC).

Against this background, the LW-VLIC is developing a Virtual Research Environment (VRE) based on Jupyter notebooks which allows users to compose workflows and manage computational experiments, e.g. for generating data products of Essential Biodiversity Variables (EBVs).

This VRE solution is demonstrated with a workflow that processes massive amounts of Light Detection and Ranging (LiDAR) data from country-wide airborne laser scanning surveys for deriving geospatial data products of ecosystem structure at high spatial resolution over broad spatial extents.

A paper describing this notebook-based VRE solution is accepted in the journal ‘Software: Practice and Experience’ and is already available as a pre-print.

Danie W. Kissling, University of Amsterdam

Most recent results from the PSF Mutual Learning Exercise on Citizen Science

Europe would benefit from greater attention to promoting citizen science within Member States and regions, and from greater cooperation and shared approaches across the European Research Area as a whole. The Mutual Learning Exercise (MLE) thus aims to facilitate an exchange of information, experiences and lessons learned, as well as identify good practices, policies and programmes in relation to the various approaches at local, regional and national levels, towards supporting and scaling up citizen science.
Against this background, the report from the latest two such exercises, focusing on policy and practice, has been published [here](#).

*Margaret Gold, Citizen Science Lab*

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**Updates from the Tropical Andes Observatory (TAO) project**

On [2 and 3 March, 2022](#) the Tropical Andes Observatory (TAO) project, held a two-day workshop where the main focus was the selecting and designing EBV indicators for the Tropical Andes. The results from the interactive sessions, the list of chosen indicators, as well as the results from the conducted throughout the workshop survey can be found [here](#).

**Note:** the survey results are in Spanish!

Moreover, TAO finalised two EBV-based indicators (species and ecosystem based) which are available in the [TAO NatureServe Dashboard](#) and the [EBV portal](#).

Additionally, the paper *Conserving Ecosystem Diversity in the Tropical Andes*, has been published, along with two map datasets, [Tropical Andes macrogroup ecosystem extent](#) and Tropical Andes formation ecosystem extent level of the International Vegetation Classification (IVC).

*Dr. Jose W. Valdez, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig*

**Scientists estimate the land area needed to save species**

Experts from the University of Amsterdam (UvA), including EuropaBON partner Daniel W. Kissling, have conducted a new study on the estimation of land area needed to save species and is available in the [Science journal](#).

Against this background, the UvA has published a press release on the topic, which you can find [here](#).

*Danie W. Kissling, University of Amsterdam*

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**News from the MarBioME - Marine Biodiversity Monitoring in Europe**
The **MarBioME - Marine Biodiversity Monitoring in Europe** study, funded by the European Commission and coordinated by the AIR Centre, with the MBON Secretariat, the EuropaBON and EuroSea team members as partners, aims to provide a holistic and global review of European marine biodiversity projects and monitoring programs and to collate information on marine biodiversity research gaps.

For almost 6 months these organisations have been collaborating and working in supporting the determination of the status of marine life monitoring in Europe to help to build a roadmap for additional marine monitoring efforts in the EU and to support EU-related policies. The results produced by MarBioME will also feed directly into MBON and EuropaBON, with the view of achieving a comprehensive and coherent EU-wide biodiversity monitoring system that is well represented across both aquatic (marine, coastal, freshwater) and terrestrial habitats. MarBioME will in this way support the designing of an EU-wide framework for monitoring biodiversity and ecosystem services. Stay tuned to know more about MarBioME’s outcomes.

*Joana Soares, Executive Secretary - Marine Biodiversity Observation Network and Project Officer - Atlantic International Research Centre*

**Open Project Officer position at the International Institution for Applied Systems Analysis (IIASA)**

The IIASA team is looking for a project officer with a background in applied ecology, to join their ever-growing team, within the scope of the IIASA BIODIVERSITY AND NATURAL RESOURCES (BNR) PROGRAM.

The BEC group coordinates the Horizon Europe project NaturaConnect starting
in July 2022, for a duration of four years. NaturaConnect aims to co-create with key decision-makers and other key stakeholders, knowledge, tools and capacity building to support Member States in realising an ecologically representative, resilient and well-connected network of conserved areas that contribute to achieving the objectives of the EU Biodiversity Strategy to 2030. This will be achieved through a combination of stakeholder engagement across scales and interdisciplinary research to develop knowledge and policy supporting tools for spatial planning and financing the implementation of TEN-N.

Against this background, IIASA is looking for a scientific project officer to join the consortium of the newly starting H2020 project NaturaConnect, along with 22 other leading European institutions.

Details about the position can be found here.

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### 4 Recent publications


EuropaBON's dissemination team would like to invite you to share all EuropaBON-related updates, stories and recent achievements to g.popova@pensoft.net. Please send us all:

• scientific papers
• events where you've participated
• products and services that you've created
• any other noteworthy achievements

With your help we will spread the word about the EuropaBON!